Met Office 3-month Outlook

Period: April – June 2018 Issue date: 22.03.18

The forecast presented here is for April and the average of the April-May-June period for the United Kingdom as a whole. The forecast for April will be superseded by the long-range information on the public weather forecast web page (www.metoffice.gov.uk/public/weather/forecast/#?tab=regionalForecast), starting from 2 April 2018.

This forecast is based on information from observations, several numerical prediction systems and expert judgement.

SUMMARY – TEMPERATURE:

For April, below-average temperatures are more likely than above-average temperatures. For April-May-June as a whole, above-average temperatures are marginally more likely than below-average temperatures.

Overall, the probability that the UK-average temperature for April-May-June will fall into the coldest of our five categories is 15% and the probability that it will fall into the warmest of our five categories is between 15 and 20% (the 1981-2010 probability for each of these categories is 20%).

CONTEXT:

La Niña is now declining. The El Niño-Southern Oscillation (ENSO), of which La Niña is the cold phase, is very likely to transition to a neutral phase within the outlook period. Its influence on conditions over the UK through this period is likely to be small.

The Madden-Julian Oscillation (MJO) is an area of enhanced thundery activity that moves eastwards through the tropics over a period of several weeks. It has recently been inactive, but there are tentative indications that it could become active in the Western Pacific by the end of March. This would favour weather patterns that bring lower-than-average temperatures to the UK in early to mid-April.

The lower stratosphere remains disturbed following the sudden stratospheric warming (SSW) event in February. It is very likely that the SSW gave a strong impetus to recent cold spells and its influence is expected to continue into the early part of the outlook period. This implies increased chances of weather patterns that bring colder-than-average conditions to the UK in April.

For April, the Met Office long-range prediction system, and systems from other prediction centres around the world, shows an increased likelihood of weather patterns with high pressure to the north or northeast of the UK. This is consistent with the global drivers discussed above and implies that mild westerly winds from the Atlantic Ocean will be less frequent than normal. As a result, there is an increased likelihood of lower-than-average temperatures (see left-hand graph of figure T2) and further spells of cold weather. There remains a chance of impacts from frost and snow, therefore, primarily across northern parts of the UK.

For April-May-June, the Met Office long-range prediction system, along with systems from other prediction centres, shows very little tendency towards any given type of weather pattern over the UK. As a result, the chances of above- and below-average temperatures are similar to normal, with above-average temperatures only slightly more likely than below-average temperatures (see right-hand graph of figure T2).

Fig T1

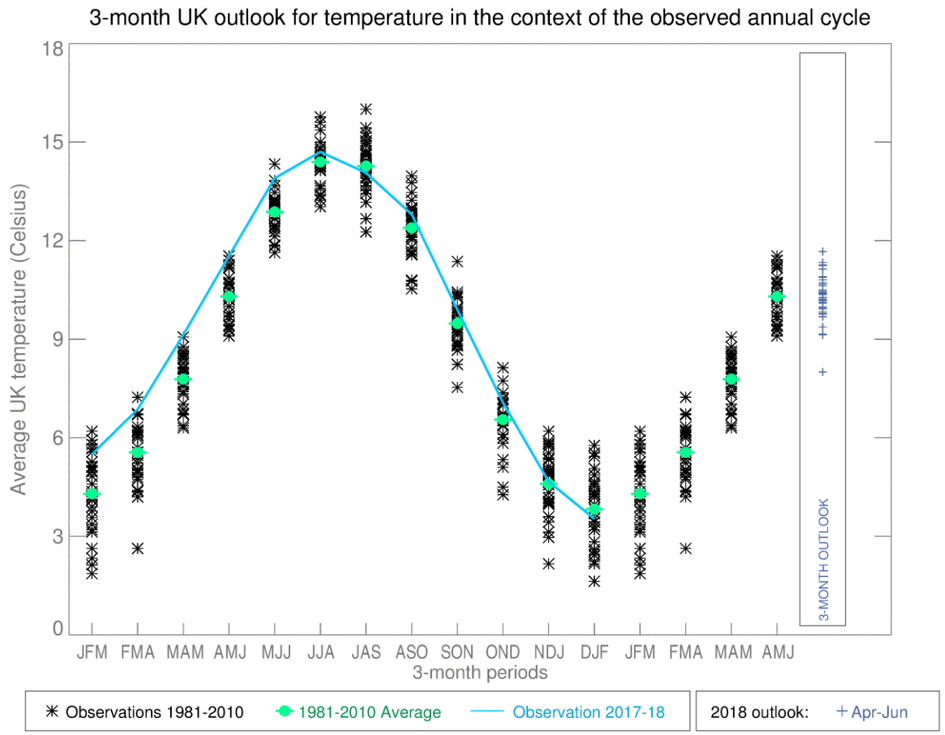


Fig T2

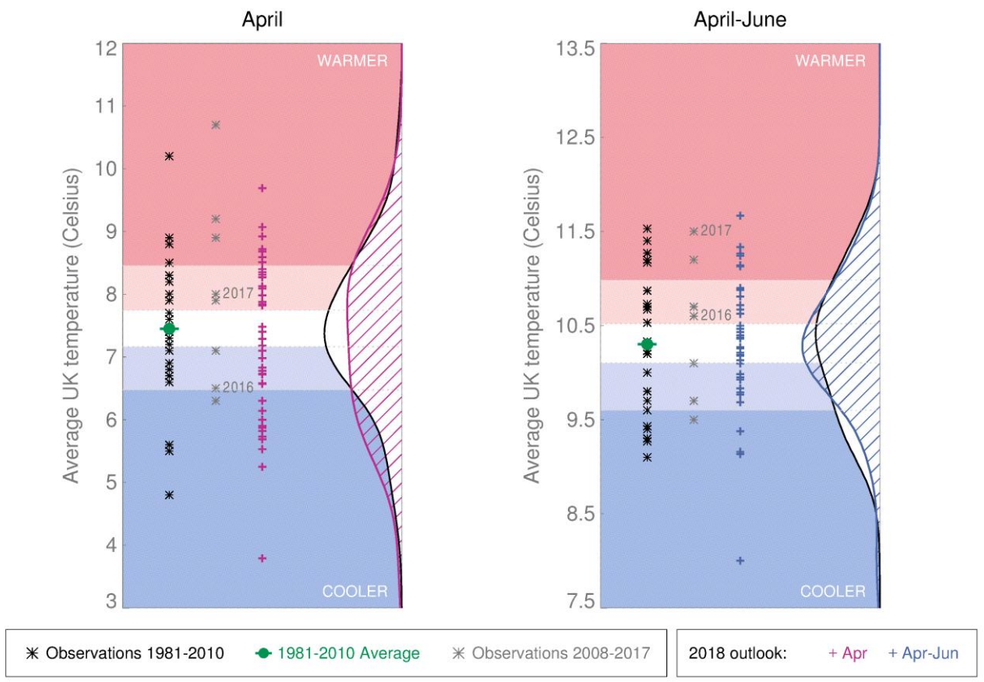
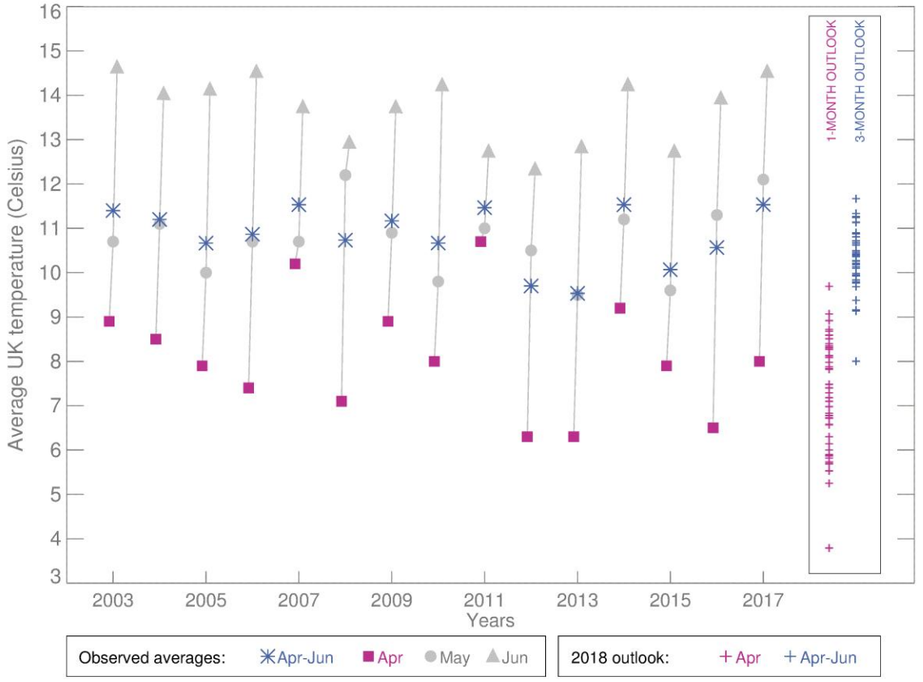


Fig T3


1-month and 3-month UK outlook for temperature in the context of recent climatology: year-to-year and within-season variability
Average UK temperature (Celsius)
Years
1-MONTH OUTLOOK
3-MONTH OUTLOOK
Observed averages: Apr-Jun Apr May Jun
2018 outlook: + Apr + Apr-Jun

This Outlook provides an indication of possible temperature and rainfall conditions over the next 3 months. It is part of a suite of forecasts designed for contingency planners.

The Outlook should not be used in isolation but should be used with shorter-range and more detailed (30-day, 15-day and 1-to-5-day) forecasts and warnings available to the contingency planning community from the Met Office.